

Claim Listing

1. (Previously presented) An apparatus for determining a characteristic of a sample, which comprises:

a base;

a sample receiver supported by the base;

a pair of nodes, including a first node and a second node, positioned at spaced apart locations in the sample receiver and operative to contact the sample when the sample is positioned in the sample receiver;

a source that generates an Rf signal having a selected frequency spectrum that is coupled to said pair of nodes and transmitted from the first node through the sample for detection by the second node;

an analyzer coupled to the pair of nodes that analyzes the Rf signal transmitted through the sample and detected by the second node to determine the characteristic of the sample; and

a pair of magnets that improves the Rf signal transmitted by the first node through the sample to the second node, one of the magnets being positioned adjacent the first node, the other of the magnets being positioned adjacent the second node.

2. (Previously presented) The apparatus as claimed in claim 1, wherein the sample is a human digit and wherein the sample receiver is sized to receive the human digit in contact with said nodes.

3. (Previously presented) The apparatus as claimed in claim 2, wherein said human digit is a finger.

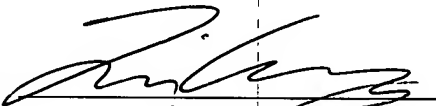
4. (Previously presented) The apparatus as claimed in claim 1, including a magnetically permeable and electrically insulating barrier disposed between one of the magnets and the first node and the other of the magnets and the second node to prevent contact therebetween.

5. (Previously presented) The apparatus as claimed in claim 1, wherein each node comprises an electrically conductive plate.
6. (Previously presented) The apparatus as claimed in claim 1, wherein the analyzer detects a change in a magnitude of at least one characteristic frequency within the selected frequency spectrum to determine the characteristic of the sample.
7. (Previously presented) The apparatus as claimed in claim 1, wherein the pair of magnets are permanent magnets that generate a magnetic field surrounding at least the pair of nodes and at least a portion of the sample when positioned within the sample receiver for analysis.
8. (Previously presented) The apparatus as claimed in claim 1, wherein the analyzer detects a change in a magnitude of the Rf signal at a specific frequency within the selected frequency spectrum to determine the characteristic of the sample, the specific frequency corresponding to a biological molecule within the sample, the characteristic corresponding to presence of the biological molecule, the change in the magnitude corresponding to the concentration of the biological molecule within the sample.
9. (Currently amended) The apparatus as claimed in claim 1 [9], wherein the characteristic is an analyte concentration.
10. (Previously presented) The apparatus as claimed in claim 9, wherein the analyte includes a biological molecule.
11. (Previously presented) The apparatus as claimed in claim 9, wherein the analyte comprises glucose.
12. (Previously presented) The apparatus as claimed in claim 9, wherein the analyte comprises a protein.
13. (Previously presented) The apparatus as claimed in claim 9, wherein the analyte comprises hemoglobin A1c.
14. (Previously presented) The apparatus as claimed in claim 9, wherein the analyte comprises a virus.

15. (Previously presented) The apparatus as claimed in claim 9, wherein the analyte comprises an enzyme.
16. (Previously presented) The apparatus as claimed in claim 9, wherein the analyte comprises cholesterol.
17. (Previously presented) A method for detecting a characteristic of a sample, comprising:
- (a) providing an apparatus comprising (i) a base; (ii) a sample receiver supported by the base, (iii) a pair of nodes, including a first node and a second node, positioned at spaced apart locations in the sample receiver and operative to contact the sample when the sample is positioned in the sample receiver, (iv) a source that generates an Rf signal having a selected frequency spectrum that is coupled to said pair of nodes and transmitted from the first node through the sample for detection by the second node, (v) an analyzer coupled to the pair of nodes that analyzes the Rf signal transmitted through the sample and detected by the second node to determine the characteristic of the sample, and (vi) a pair of high gauss permanent magnets that improves the Rf signal transmitted by the first node through the sample to the second node, one of the magnets being positioned adjacent the first node, the other of the magnets being positioned adjacent the second node;
 - (b) receiving the sample in the sample receiver such that the sample is in contact with the first node and the second node; and
 - (c) analyzing a change in the Rf signal transmitted by the first node through the sample to the second node to determine the characteristic of the sample.
18. (Previously presented) The method as claimed in claim 17, wherein the change is a change in a magnitude of at least one characteristic frequency within the selected frequency spectrum.
19. (Previously presented) The method as claimed in claim 18, wherein the characteristic is a presence of a molecule in the sample.
20. (Previously presented) The method as claimed in claim 18, wherein the characteristic is a concentration of a molecule in the sample.

Applicant looks forward to a supplemental notice of allowance. If a telephone conversation with Applicant's representative would be useful to clarify or expedite matters, the office is invited to call the undersigned.

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